

Comments on ET 03-104

Broadband over Power Line

Dear Sir/Madam,

I am very grateful for the opportunity to comment on this Notice of Inquiry, noting in particular from the "FCC News" (DOC-233537A1.pdf) that the Commission explicitly requests information on issues including (my italics):

- *The potential interference effects, if any, on authorized spectrum users*
- Changes that may be needed in Part 15 technical rules and the equipment approval process to foster the development of BPL and *to ensure that interference is not caused to other services* as a result of this technology

I have followed the question of Broadband over Power Line for some years, and have made extensive investigations into its propensity to cause interference. While the potential for BPL to extend the availability of electronic access to data, information and services is understandably attractive, it is important that the resulting interference to licensed, legitimate users of the radio spectrum, especially those operating in the HF range, should be noted, and the consequences considered.

My concerns relate especially to interference in the home (where it is strongest) to such services as broadcasting and amateur radio, but also to the impact at greater distances of widespread BPL deployments on other services including aviation safety.

May I please respectfully draw the following publications on these issues to the FCC's attention? They are all available as PDF files on the BBC R&D website from the URLs given below.

Yours faithfully,

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Publications concerning Broadband over Power Line:

"Do EMC limits protect broadcasting as intended?"

Paper originally published in the Record of the 15th International Zurich Symposium on Electromagnetic Compatibility, February 18-20 2003. Available as BBC R&D White Paper no 055 (which includes the presentation as well), via:

<http://www.bbc.co.uk/rd/pubs/whp/whp055.html>

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“AM broadcasting and emissions from xDSL/PLT/etc. Compatibility analysis of various proposals for limits”

BBC R&D White Paper no 012, available via:

<http://www.bbc.co.uk/rd/pubs/whp/whp012.html>

“Emission limits: A new proposal based on a limited increase in the noise floor”

BBC R&D White Paper no 013, available via:

<http://www.bbc.co.uk/rd/pubs/whp/whp013.html>

“Cumulative effects of distributed interferers”

BBC R&D White Paper no 004, available via:

<http://www.bbc.co.uk/rd/pubs/whp/whp004.html>

“The threat to new radio systems from distributed wired-communication installations”

Paper presented at 8th International Conference on HF Radio Systems & Techniques, 10-13 July 2000, IEE Conference Publication No. 474, pp. 385-389. Available as:

<http://www.bbc.co.uk/rd/pubs/papers/pdffiles/hf2000jhs.pdf>

“Protection of ‘sensitive’ receiving sites”

Paper for [UK] RA Working Group on HF Mains Signalling, October 1999. Available as:

<http://www.bbc.co.uk/rd/pubs/papers/pdffiles/t1282.pdf>